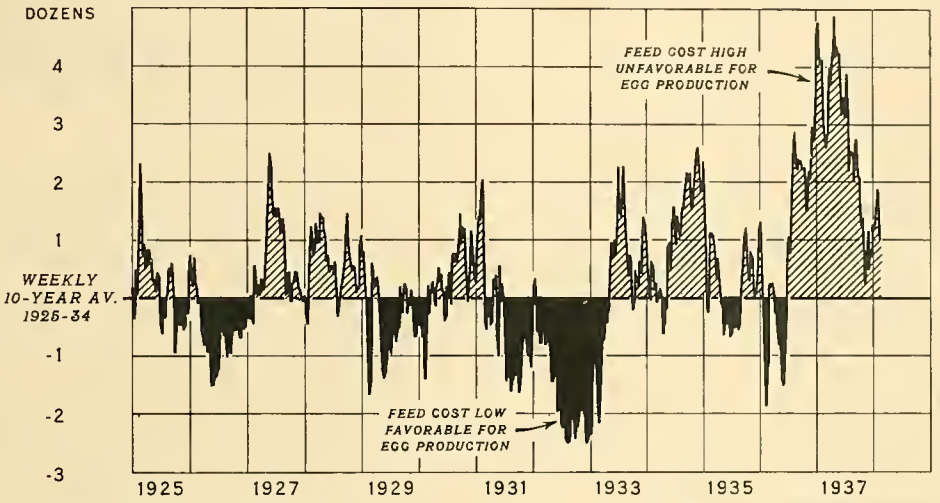
UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
WASHINGTON

PES- 15 MARCH 2 1938

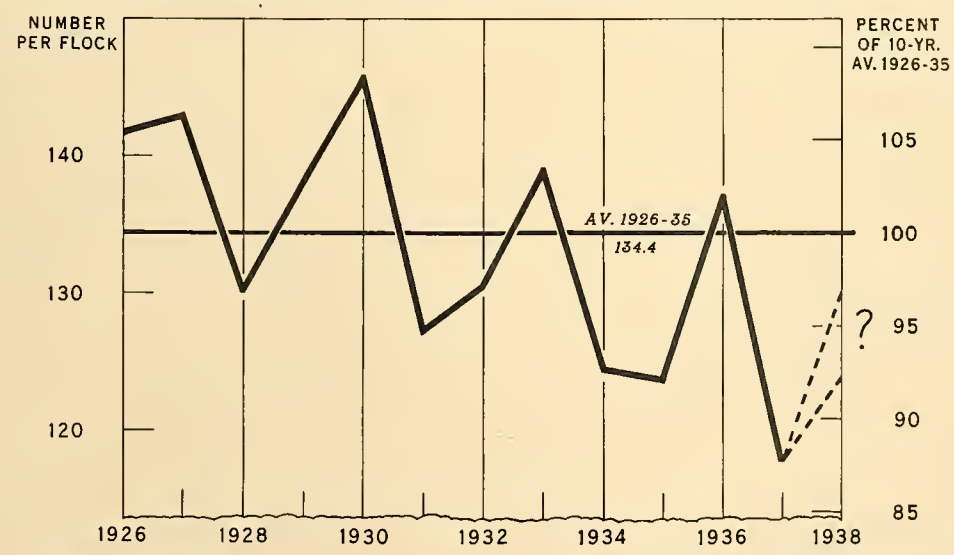
THE POULTRY AND EGG SITUATION

FEED-EGG RATIO, 1925 TO DATE



U. S. DEPARTMENT OF AGRICULTURE NEG. 32471 BUREAU OF AGRICULTURAL ECONOMICS

CHICKS AND YOUNG CHICKENS PER FARM FLOCK ON JUNE 1, 1926-38



U. S. DEPARTMENT OF AGRICULTURE NEG. 31505 BUREAU OF AGRICULTURAL ECONOMICS

THE NUMBER OF CHICKS AND YOUNG CHICKENS PER FARM FLOCK ON JUNE 1 IS A MEASURE OF THE TOTAL HATCH. THE DOTTED LINES INDICATE THAT THE 1938 HATCH IS EXPECTED TO BE FROM 5 TO 10 PERCENT GREATER THAN IN 1937. THE MAIN BASIS FOR THIS INDICATION IS THE 25 PERCENT REDUCTION IN THE OCTOBER-MARCH FEED-EGG RATIO FROM THAT A YEAR EARLIER, AS SHOWN IN THE UPPER CHART.

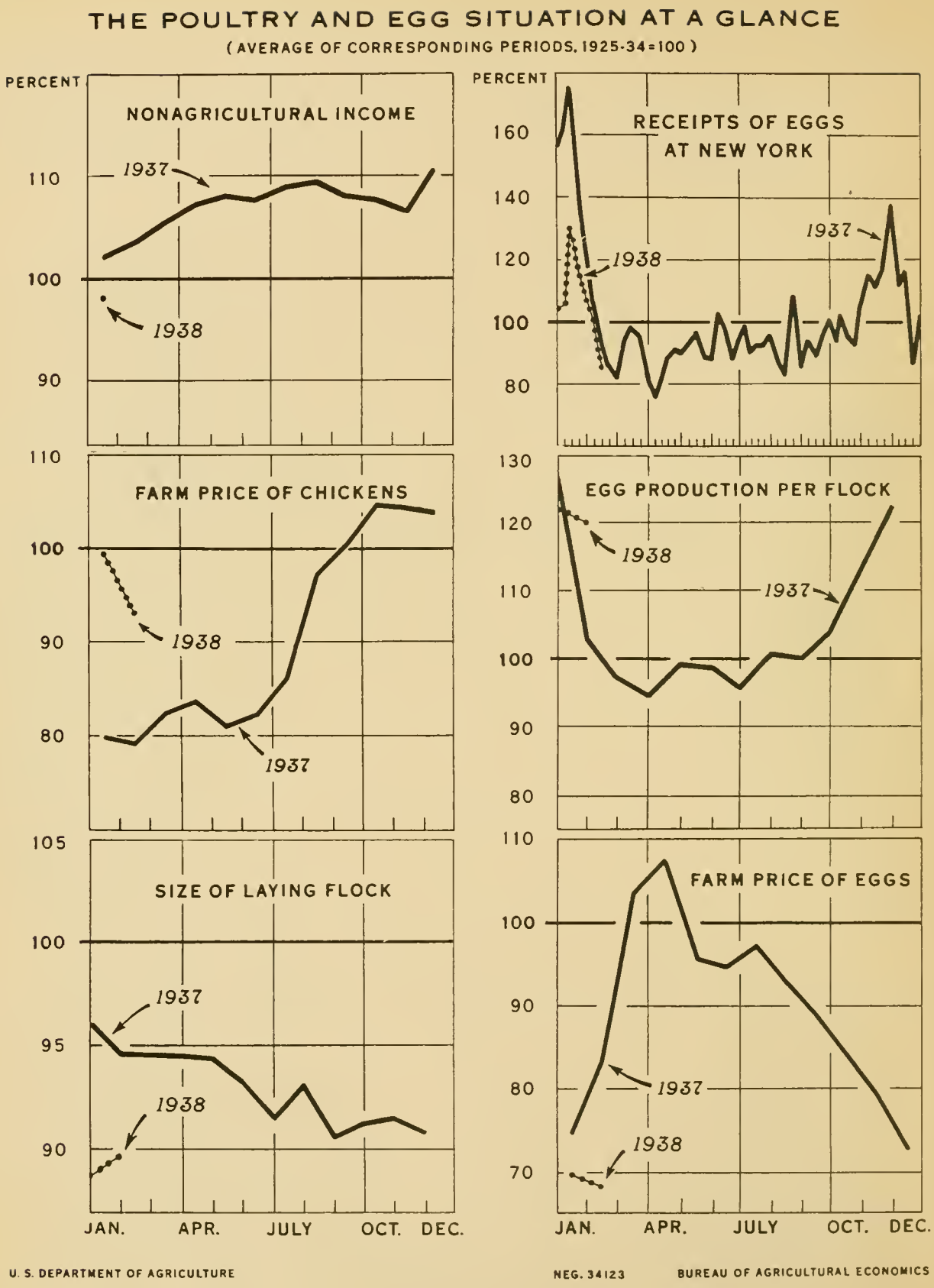

THE POULTRY AND EGG SITUATION AT A GLANCE
(AVERAGE OF CORRESPONDING PERIODS, 1925-34=100)
PERCENT
NONAGRICULTURAL INCOME
1937
1938
110
100
90
PERCENT
RECEIPTS OF EGGS AT NEW YORK
160
140
120
100
80
1937
1938
FARM PRICE OF CHICKENS
110
100
90
80
1938
1937
EGG PRODUCTION PER FLOCK
130
120
110
100
90
80
1938
1937
SIZE OF LAYING FLOCK
105
100
95
90
1937
1938
FARM PRICE OF EGGS
110
100
90
80
70
1937
1938
JAN.
APR.
JULY
OCT.
DEC.
U. S. DEPARTMENT OF AGRICULTURE
NEG. 34123
BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 1

THE POULTRY AND EGG SITUATION

Summary

The most striking development in the poultry and egg situation in February, says the Bureau of Agricultural Economics, was the sharp decline in egg prices. Lower consumer incomes than a year earlier, large holdings of frozen eggs, a high rate of egg production and the completion of a very unprofitable egg storage year have much more than offset the effects of the small flock size. It is believed, however, that egg prices, in the last half of 1938 will be above those of 1937. The basis for this expectation is the likelihood of lower spring production, of lower storage stocks of all eggs on August 1, and of no further decline in consumer incomes after the middle of the year.

Chicken prices ordinarily rise from December to May, but in mid-February they were the lowest since July 1937. Because of low consumer incomes the average seasonal advance this year is not expected. In part at least, the seasonal advance was anticipated by the non-seasonal advance of the late summer and fall of 1937. Low stocks of poultry, both in storage and on the farm, however, will tend to keep chicken prices above those of 1937 until the middle of the year.

Chicken prices in the last half of 1938 are likely to be under those of a year earlier chiefly because the larger hatch expected this year will increase marketings of poultry in this period. The basis for the expectation of an increase in the 1938 hatch of about 5 to 10 percent over the small hatch last year lies in the more favorable feed-egg price relationship.

Feed situation

The cost of poultry feed relative to the price of eggs normally rises from December to June. In January 1938 the rise was somewhat more than average but in February was less than average. The actual level of the feed-egg ratio for the week ending February 19, however, was about 20 percent above average but about 30

percent below the ratio for the same week a year ago. For the months October through February the ratio has averaged about 25 percent below that of the same period in 1936-37.

The feed-egg ratio at Chicago, specified weeks, average 1925-34, annual 1937 and 1938

Year	Dozens of eggs required to buy 100 pounds of poultry ration										
	Week ended as of 1938										
	Jan. 1	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26	Apr. 30	July 2	Sept. 3	Oct. 29	Dec. 3
	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.
Average 1925-34	4.16	4.82	5.08	5.29	5.70	6.04	6.43	6.71	5.68	4.24	3.64
1937	6.98	9.03	9.03	9.16	9.40	9.13	10.80	10.18	8.17	5.32	4.79
1938	4.89	6.39	6.68	7.17	6.70						

Hatchings

One of the most important consequences of this change in the feed-egg ratio from that of early 1937 is its effect in increasing the 1938 hatch. The exact extent of this increase cannot, of course, be foreseen now; many circumstances may occur to alter such predictions as may be made.

One basis for estimating the future extent of the hatch is the report of commercial hatcheries. In January this report showed an increase of 56 percent in the number of salable chicks hatched compared with January 1937. The increase in number of eggs set during the month, however, was only 18 percent. No estimates are available on changes in farm hatchings.

In any one year, a good measure of the total hatch, both farm and commercial, is the number of chicks and young chickens per farm flock on June 1. The chart on the first page of this report shows how these numbers have varied since 1926. Note the peaks and lows occurring at rather regular 3-year intervals. The last peak was in 1936 and it is believed that 1937 represents a low. The dotted lines indicate the range within which the 1938 hatch is expected to come. The upper line corresponds to an increase from 1937 of 10 percent; the lower line to an increase of 5 percent.

The basis for these estimates lies in the chart on page 5 showing the relationship of the change in the feed-egg ratio to the change in the number of chicks from the year before. The percentage change in the October-March feed-egg ratio has been compared with the percentage change in the hatch for the years 1927-37, and the average relationship has been indicated by the heavy line. Thus, with a 25 percent reduction from 1937 in the feed-egg ratio, as is likely this year for these months, there is indicated a 7-percent increase in the hatch. The effects of many other circumstances which influence the hatch keep this relationship from being followed exactly in any one year.

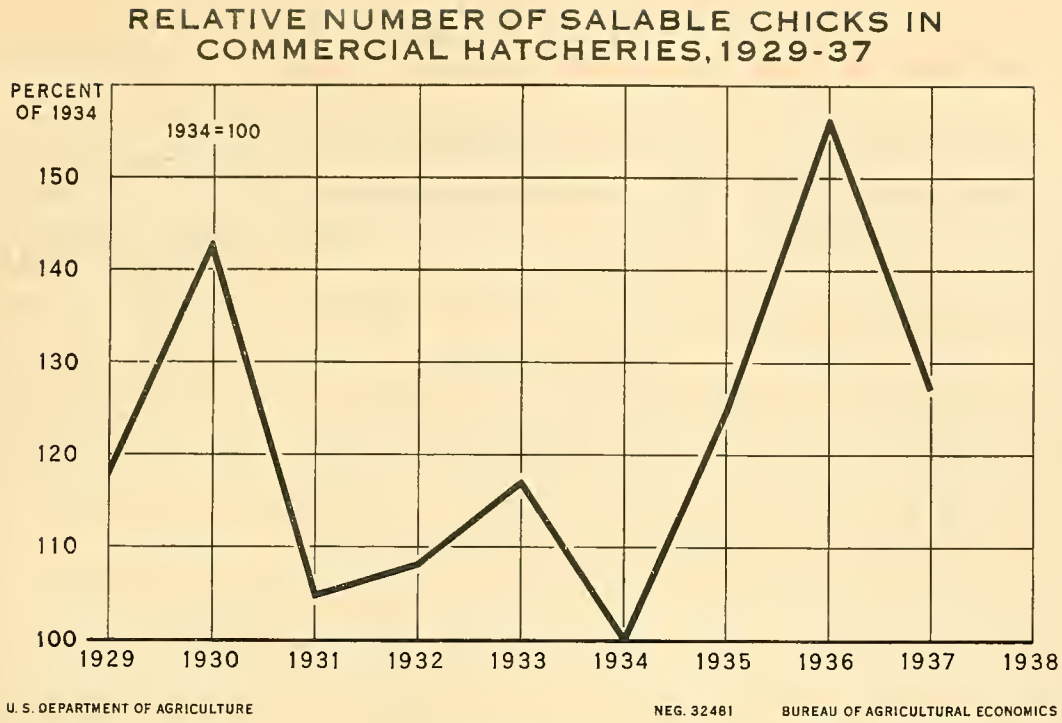


FIGURE 2

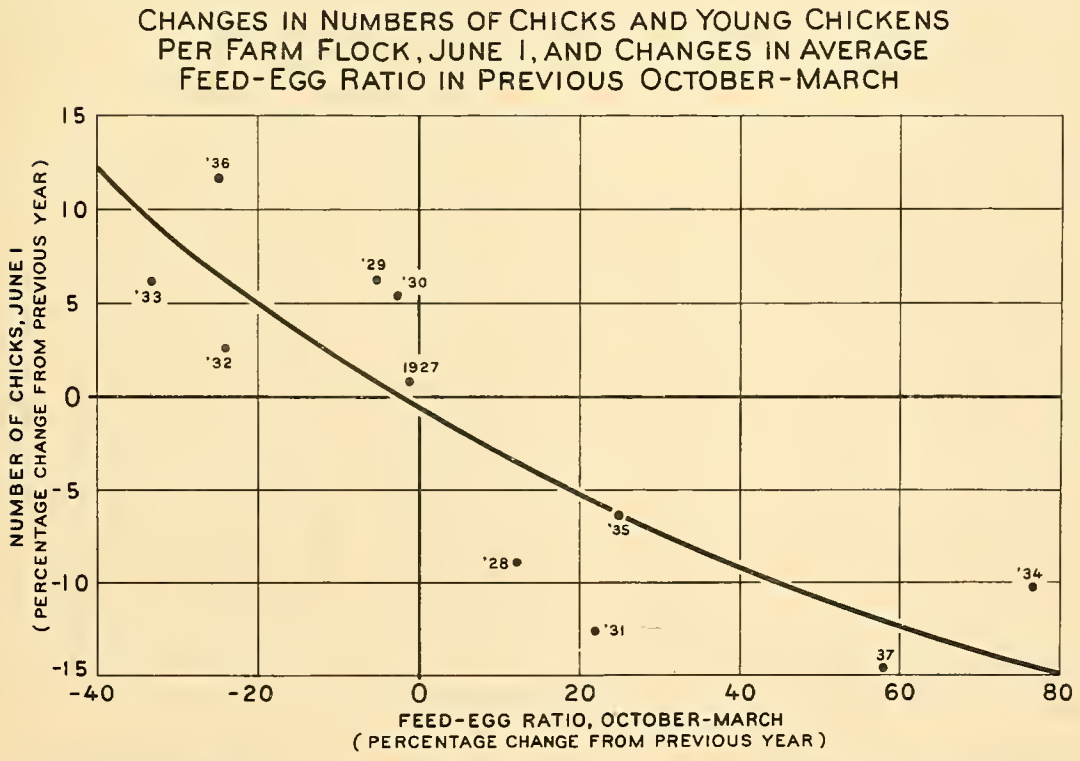


FIGURE 3

Chicago Feed-Egg Ratio - Deviations from ten year weekly average, 1925 - 1934

Week No.	10 Yr. Av. 1925-34	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1	4.06	.16	.58	-.09	.03	1.07	-.14	.29	-.54	-2.34	.99	1.88	1.16	3.70	1.24
2	4.23	-.29	.73	-.32	-.05	.75	-.48	.93	.21	-2.18	.71	2.37	1.31	4.56	1.17
3	4.52	-.35	.38	-.33	-.29	.78	-.35	1.19	.33	-1.59	.27	1.62	.64	4.78	1.36
4	4.82	-.14	.21	.04	-.44	.35	-.66	1.40	-.02	- .77	.04	.88	.04	4.31	1.57
5	5.08	.48	.47	-.34	-.01	-.16	-.50	1.38	-.57	- .72	-.01	.58	-.38	4.08	1.60
6	5.29	.07	.70	-.43	.59	-.42	-1.08	1.90	-.57	-1.36	.64	-.17	-1.26	4.11	1.88
7	5.70	.64	.24	.06	.87	-.89	-1.39	2.03	-.76	-1.44	.60	-.23	-1.86	3.56	1.00
8	6.04	1.44	.16	.57	1.24	-1.66	- .74	1.08	-.76	-1.88	.52	.01	-1.24	3.09	
9	6.20	2.30	-.07	.36	1.08	-1.42	- .08	.24	-.45	-2.15	.14	1.10	-1.09	2.97	
10	6.16	1.49	-.03	.07	.77	- .58	.21	-.41	-.06	-1.69	.27	1.11	.13	2.77	
11	6.14	.76	-.10	.24	.88	.60	-.24	-.54	-.20	-1.45	.00	1.11	.25	2.61	
12	6.13	.91	-.57	.07	1.29	.49	-.01	-.15	-.80	-1.16	-.07	1.06	.24	2.94	
13	6.23	.51	-.67	.23	1.17	.21	.14	-.08	-.80	- .73	.03	.87	.25	3.49	
14	6.31	.59	-.80	.34	.99	.31	.29	-.43	-.71	- .71	.17	.67	.07	4.00	
15	6.49	.83	-.80	.17	.96	.36	-.03	-.39	-.53	- .57	.04	.36	-.24	3.76	
16	6.46	.83	-.79	.16	1.45	.26	-.12	.01	-.93	- .39	-.62	.69	-.25	4.07	
17	6.43	.63	-.92	.25	1.40	-.05	.13	.31	-.97	- .42	-.40	.34	-.42	4.37	
18	6.43	.68	-.87	.67	1.38	-.25	.24	.25	-1.44	- .23	-.41	.15	-.59	4.88	
19	6.48	.58	-.97	.96	1.21	-.73	.28	.38	-1.44	- .18	-.14	-.07	-.79	4.19	
20	6.56	.30	-1.18	1.35	1.14	-.97	.50	-.02	-1.35	.40	-.20	-.13	-.70	4.36	
21	6.82	.31	-1.51	1.89	1.06	-1.26	.30	-.66	-1.24	.61	.54	-.39	-1.04	4.28	
22	6.98	.10	-1.78	2.49	.65	-1.39	.41	-1.00	-1.33	.96	.89	-.64	-1.38	4.25	
23	6.87	.43	-1.49	2.27	.74	-1.26	.14	.54	-1.97	.71	.95	-.44	-1.50	3.88	
24	6.76	.41	-1.34	1.76	.46	- .91	.11	- .07	-1.93	1.00	.48	-.44	-1.29	3.19	
25	6.66	.02	-1.34	1.65	.46	- .79	-.37	.25	-1.87	.76	1.25	-.21	- .65	3.25	
26	6.71	-.47	-1.28	1.44	.55	- .73	-.24	.03	-1.72	.98	1.40	-.49	- .39	3.47	
27	6.81	-.62	-1.24	1.55	.54	- .85	.20	-.33	-2.19	1.36	1.56	-.66	.34	3.13	
28	6.76	-.27	- .91	1.40	.46	- .97	.00	-.75	-2.24	2.26	1.06	-.60	.91	3.88	
29	6.61	-.31	- .55	1.43	.63	- .66	.45	-1.44	-2.03	1.60	.92	-.45	1.04	3.19	
30	6.56	-.31	- .39	1.56	.23	- .51	.16	-1.30	-2.23	1.38	1.41	-.21	.79	2.21	
31	6.38	.00	- .50	1.38	.17	- .30	-.10	-1.21	-2.46	1.77	1.28	-.26	1.33	2.52	
32	6.43	.06	- .63	1.13	-.30	- .58	.55	-1.12	-2.50	2.27	1.09	-.51	1.85	2.51	
33	6.18	.50	- .67	1.14	-.15	- .74	.78	-1.60	-2.47	2.06	1.11	-.45	2.57	2.40	
34	5.91	.45	- .80	1.37	.07	- .49	.64	-1.44	-2.35	1.21	1.37	-.46	2.89	2.01	
35	5.68	.39	-1.01	1.11	.21	- .49	.76	-1.40	-1.97	.89	1.55	-.54	2.31	2.49	
36	5.52	.60	-.90	.52	.28	- .20	.64	-1.33	-1.87	.61	1.61	-.43	2.22	2.71	
37	5.31	.40	- .82	.07	.48	.18	.87	-1.31	-2.09	.39	1.80	-.08	2.42	2.35	
38	5.20	-.18	- .96	.09	.68	- .01	1.05	-1.06	-2.30	.74	1.97	.33	2.38	2.10	
39	5.02	-.94	- .72	.41	.76	- .24	1.46	-1.12	-2.40	.63	2.17	.47	2.35	2.06	
40	4.67	-.67	- .46	.46	1.13	.14	.97	-1.41	-2.22	- .01	2.05	.67	2.37	1.53	
41	4.56	-.35	- .55	-.04	1.43	.25	1.21	-1.63	-2.22	- .18	2.04	1.04	2.23	1.25	
42	4.32	-.36	- .48	-.04	.93	.16	1.05	-1.35	-2.05	- .01	2.16	1.20	2.24	1.36	
43	4.24	-.46	- .54	.21	.82	-.24	1.20	-1.13	-1.95	.47	1.58	.88	2.12	1.08	
44	3.97	-.45	- .43	.26	.57	-.03	.79	- .80	-1.94	.37	1.62	.46	1.88	.72	
45	3.79	-.34	- .46	.36	.50	-.07	.40	- .61	-1.94	.36	1.81	.29	1.52	.25	
46	3.60	-.46	- .57	.45	.55	-.10	.25	- .52	-1.87	.21	2.08	.80	2.19	.64	
47	3.60	-.54	- .68	.46	.54	.13	-.06	- .73	-1.96	.65	2.23	.72	2.07	.89	
48	3.64	-.47	- .66	.43	.34	-.13	.28	- .91	-1.98	.55	2.50	.38	2.28	1.15	
49	3.92	-.21	-.26	.18	.10	-.33	.70	-1.00	-2.27	.43	2.62	.09	2.52	.93	
50	4.13	-.16	- .53	.14	.13	-.65	1.15	- .98	-2.50	1.06	2.29	.05	2.95	.42	
51	4.18	-.25	- .35	.01	.17	-.65	.85	- .91	-2.40	1.38	2.14	.23	2.75	.69	
52	4.16	.09	- .50	- .06	.87	-.42	.43	-1.20	-2.33	1.26	1.84	.60	2.82	.73	

Poultry marketings

Receipts of dressed poultry at New York in the first 3 weeks of February were 9 percent under 1937 and 24 percent under the 1925-34 average for this period. With low stocks of poultry on farms, receipts of poultry during the first half of this year will probably remain below both a year earlier and the 10-year average.

Receipts of dressed poultry at New York, average 1925-34, annual 1937-38

Year	Week ended as of 1938							
	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26	Apr. 30	May 28	July 2
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Average 1925-34	3,324	3,464	2,939	2,841	2,432	2,245	2,651	3,305
1937	3,720	3,220	2,236	2,259	1,770	3,419	3,342	3,739
1938	2,639	2,621	2,055	2,333	2,340			

Poultry storage

Storage holdings of poultry decline from a maximum in January to a low point during the summer. During this period they are used to supplement the usually low receipts of fresh poultry and hence are an important source of supply for consumption. With storage stocks much less than in 1937 there is no likelihood of such a large carry-over stock in mid-summer as was the case last year.

Storage stocks and out-of-storage movement of frozen poultry at 26 markets

Year	U.S. Total Jan. 1	Week ending as of 1938				
		Storage stocks: Jan. 29	Out of storage movement: Feb. 5	Feb. 12	Feb. 19	Storage stocks Feb. 19
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Average 1925-34	121,464	94,917	1,318	1,717	2,334	89,548
1937	137,837	136,050	2,339	3,159	3,339	127,213
1938	123,500	88,480	2,032	2,936	2,639	30,873

Chicken prices

On February 15 the farm price of chickens was 16 cents, the lowest since July 1937. In most years prices advance from December to May. It is believed that part of the seasonal advance this year has been anticipated in the non-seasonal rise in prices in the late summer and fall of 1937. Hence, while low supplies of poultry in storage and on the farm will tend to keep prices this spring above those of last spring, despite lower consumer incomes, a less than average increase in prices from December is likely.

Because of a probable increase in the hatch over that of 1937, chicken prices in the last half of 1938 are expected to be below those of a year earlier.

Farm price of chickens per pound

Year	Jan.	Feb.	Mar.	May	July	Aug.	Sept.	Oct.	Dec.
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Average 1925-34	16.8	17.2	17.5	18.3	17.8	17.3	17.3	16.8	15.8
1936	16.5	16.9	16.6	16.6	16.1	15.1	14.9	14.0	12.6
1937	13.4	13.6	14.4	14.8	15.3	16.8	17.4	17.6	16.4
1938	16.7	16.0							

Nonagricultural income, average 1925-34, annual 1936-37
(Seasonally corrected indexes, 1924-29 = 100)

Year	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Dec.
Average 1925-34	91.0	90.8	90.4	89.7	89.8	89.6	89.6	89.4	89.4	88.8
1936	81.5	81.9	82.5	84.1	85.1	86.8	87.4	87.9	89.8	100.9
1937	92.9	93.9	95.3	96.9	96.9	97.7	98.2	96.8	96.3	98.3
1938	89.3									

Laying flock size

The laying flock size is usually near its maximum for the year on January 1. This year, however, the February 1 numbers exceeded those a month before. The laying flock is still at a low level relative to past years (see cover chart of January 1938 Poultry and Egg Situation); it is 5 percent below 1937 and 10 percent below the 1925-34 average.

Changes in the number of laying birds in the farm flock have a distinctly cyclical character. When adjusted for average seasonal variation, low points have occurred at rather regular 3-year intervals in the first quarters of 1926, 1929, 1932 and 1935. It is likely that the first quarter of 1938 will mark another such low in numbers of laying birds.

As pointed out, the feed-egg ratio is an important factor in determining the size of hatch. Similarly the ratio influences the size of the laying flock. In 1938 the usual decline in numbers of laying birds from January or February to the low point in September is likely to be less than the average of 25 percent because the feed-egg price situation is so much more favorable to the poultryman than it was last year. With more favorable feeding conditions, farmers tend to cull less severely than otherwise.

Average number of laying hens in farm flocks on the 1st day of month

Year	Jan.	Feb.	Mar.	May	June	Aug.	Sept.	Nov.	Dec.
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Average 1925-34	87.5	87.2	84.7	77.4	73.4	66.8	66.1	75.7	81.9
1937	84.2	82.5	80.0	73.1	68.5	62.1	59.9	69.3	74.4
1938	77.6	78.2							

Egg production

The rate of egg production per 100 hens and pullets of laying age in farm flocks reached a new high level for February 1 - 25 percent above last year's figure and 33 percent above the 1925-34 February 1 average. Egg production

Eggs laid per 100 hens and pullets of laying age in farm flocks

Year	Jan.1	Feb.1	Mar.1	May 1	July 1	Sept.1	Nov. 1	Dec. 1
	Number	Number	Number	Number	Number	Number	Number	Number
Average 1925-34	16.5	24.2	38.4	55.1	42.2	32.4	17.0	13.9
1937	22.0	25.7	39.2	57.8	44.4	36.1	21.1	18.6
1938	22.7	32.2						

per bird has been unusually high since January 1937. As to its course in the spring of 1938 the record of the past year would suggest that no prediction can be made with much certainty. The following table shows, however, that the sum of layings per 100 birds in April, May and June has departed on the average by less than 2 percent from the 10-year (1925-34) average and even in record years by less than 4 percent from the 10-year average.

Eggs laid per 100 hens and pullets of laying age in farm flocks
(Sum of layings on April 1, May 1 and June 1) 1925-37

Number	Year	Number	Year
153.8	1934	157.7	1926
155.1	1925	159.4	1935
155.6	1928	159.5	1931
155.7	1932	159.7	1927
157.1	1933	161.8	1929
157.3	1930	162.4	1936
157.4	Av. 1925-34	163.1	1937

Hence, if it is assumed that the rate of laying in these 3 months (April, May and June) of 1938 may be as much as 5 percent above average - an exceptional occurrence - and if the number of layers remains about 10 percent below average, as at present, then total production of eggs in the spring of 1938 will be about 5 percent less than it was a year earlier.

UNIVERSITY OF FLORIDA
3 1262 08903 9761

Egg marketings

Receipts of eggs at New York in the first 3 weeks of February were 9 percent below 1937 and 3 percent below average. While receipts normally increase from week to week at this season of the year, this was not the case a year ago nor in February 1938. The course of egg marketings in the spring, of course, tends to follow that of egg production.

Receipts of eggs at New York, specified weeks, average 1925-34, annual 1937-38

Year	Week ending as of 1938							
	Jan.29	Feb. 5	Feb.12	Feb.19	Feb. 26	Apr.30	May 28	July 2
	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases
Average 1925-34	112.2	116.0	116.3	125.4	134.1	235.1	217.9	160.0
1937	152.0	140.7	1/123.4	116.6	1/115.2	213.8	193.4	151.5
1938	129.2	123.9	116.6	106.2	131.8			

1/ 5-day week.

Egg storage

Stocks of shell eggs in cold storage at 26 major storing centers are below those of early 1937 and also below the 1925-34 average. Stocks of frozen eggs on February 26, however, were more than twice as great as those of a year earlier. These large holdings of frozen eggs may lead to a reduction in egg breaking this spring and hence to an increase in the quantity of eggs to be consumed at once or to be stored in the shell.

Egg prices

The farm price of eggs on February 15 was 24 percent below that of a month earlier and 41 percent below the seasonal peak in November. On the average(1925-34), the decline is 23 percent from mid-January to mid-February and 33 percent from the peak. Egg prices usually decline until March or April, and in these months they average about 35 to 40 percent under the previous December. In 1937 prices declined throughout the spring.

In 1938 it seems likely that the low point in egg prices will be reached early in the spring. The unfavorable storage margin, the heavy carry-over of frozen eggs and lower consumer incomes all will tend to keep prices in the early spring below those of a year earlier. It is believed, however, that the small flock size will so reduce production that by late spring prices will rise above those of 1937. With smaller storage stocks by August 1 than a year before, the spread in price between 1938 and 1937 is expected to widen - assuming that consumer incomes do not fall by more than is now anticipated.

Farm prices of eggs per dozen

Year	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Oct.	Nov.	Dec.
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Average 1925-34	31.0	24.0	19.3	18.7	18.7	20.0	22.0	30.0	35.4	35.7
1936	22.8	23.8	17.5	16.8	18.1	20.0	22.4	27.6	32.5	30.5
1937	23.1	20.1	19.9	20.1	17.9	19.4	20.4	25.2	28.9	26.0
1938	21.6	16.4								